

Evaluation of Alternative Carbon Fibers to Improve Joint Performance in 3D Woven Heatshields, Phase I

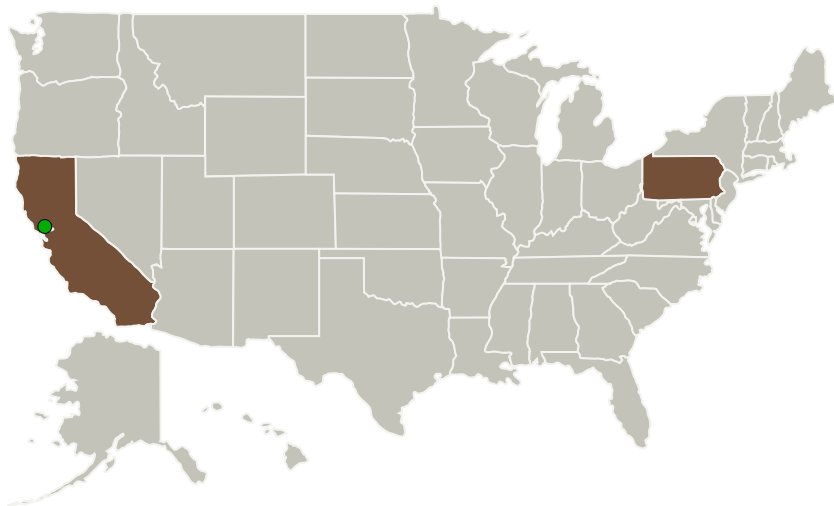
Completed Technology Project (2016 - 2016)



Project Introduction

Abstract

Primary U.S. Work Locations and Key Partners



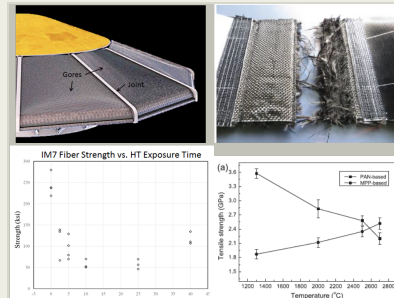
Organizations Performing Work	Role	Type	Location
Materials Research and Design, Inc.	Lead Organization	Industry	Wayne, Pennsylvania
● Ames Research Center(ARC)	Supporting Organization	NASA Center	Moffett Field, California

Primary U.S. Work Locations

California	Pennsylvania
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Project Transitions

▶ **June 2016:** Project Start



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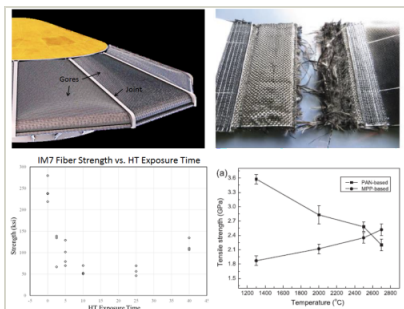


✓ **December 2016:** Closed out

Closeout Documentation:

- Final Summary Chart(<https://techport.nasa.gov/file/139850>)

Images



Briefing Chart Image

Evaluation of Alternative Carbon Fibers to Improve Joint Performance in 3D Woven Heatshields, Phase I
(<https://techport.nasa.gov/image/128733>)



Final Summary Chart Image

Evaluation of Alternative Carbon Fibers to Improve Joint Performance in 3D Woven Heatshields, Phase I Project Image
(<https://techport.nasa.gov/image/134569>)

Organizational Responsibility

Responsible Mission Directorate:

Space Technology Mission Directorate (STMD)

Lead Organization:

Materials Research and Design, Inc.

Responsible Program:

Small Business Innovation Research/Small Business Tech Transfer

Project Management

Program Director:

Jason L Kessler

Program Manager:

Carlos Torrez

Principal Investigator:

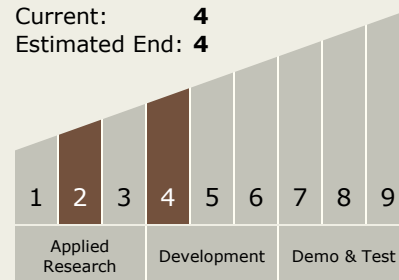
Kerry Howren

Technology Maturity (TRL)

Start: 2

Current: 4

Estimated End: 4



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Technology Areas

Primary:

- TX14 Thermal Management Systems
 - └ TX14.3 Thermal Protection Components and Systems
 - └ TX14.3.1 Thermal Protection Materials

Target Destinations

The Moon, Mars, Outside the Solar System, The Sun, Earth, Others Inside the Solar System